



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
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NOV - 7 2011

Chairman Pedro Nieves Miranda
Commonwealth of Puerto Rico
Junta de Calidad Ambiental
Edificio de Agencias Ambientales
Avenida de Ponce de León 1308
Carretera Estatal 8838
Sector de Cinco
Rio Piedras, Puerto Rico 00926

Re: **"Agremax"** Manufactured Aggregate - Resolutions and Notifications

Dear Chairman Nieves:

I am **writing** to express concern regarding the Resolutions and Notifications established by the Puerto Rico Environmental **Quality** Board (EQB) for coai **ash** aggregate, **known** as "Agremax," generated by the AES Puerto Rico L.P. coai-fired **power plant in Guayama** (i.e., EQB Resolutions R-96-39-1 and R-00-14-2, **dated** October 29, 1996, **April 25, 2000**, respectively). As you know, Resolution R-96-39-1 concluded that the production of Agremax **was** not subject to **solid** waste regulation in Puerto Rico, **while** Resolution R-00-14-2 ratified Resolution R-96-39-1.

We note that the Resolutions do not include provisions for engineering controls, nor **specify** appropriate uses or **otherwise limit the** use of Agremax by end **users**. **Rather**, we **understand** that the Resolutions **allow** Agremax to be used as a product. A **February 13, 2007**, **report** to the Puerto Rico legislature, detailing a **study** conducted by the Puerto Rico **House** of Representatives, **supports** such use, **based** on Agremax not exhibiting the **U.S. Environmental Protection Agency (EPA) hazardous** waste toxicity **characteristic**.

As you may know, EPA has published a proposed **rule**¹ for the regulation of **coal combustion residuals** that includes provisions for **beneficial reuse**. The proposed **rule** reiterates EPA's **determination** that, with regard to "...situations where large **quantities** of [coal combustion residues] **have been** used indiscriminately as unencapsulated general **fill**....the Agency **does** not consider **this** a beneficial use...**but** rather considers it waste management" (75 F.R. 35154). The

¹ Disposal of Coai Combustion Residuals From **Electric** Utilities; Proposed Rule, June 21, 2010, 75 F.R. 35128 - 35264"

proposed rule states EPA's conclusion that "....these practices raise considerable environmental concerns" (75 F.R. 35155).

Our concerns regarding EQB's Resolutions are thus threefold:

- 1) In **several** states in which similar "beneficial use determinations" are in effect, a regulatory **framework** exists to define such use, establish engineering controls, and **limit** adverse environmental impacts. For **example**, **Wisconsin** prohibits "....the use of industrial byproducts as paved roadway **subbase** or base **fill**...." in residential **areas**. **Rhode Island** requires that "....end uses involving land application [of recycled product]shall be....subject to heightened **scrutiny** as to whether the use constitutes **beneficial reuse** or is simply an alternative means of disposal." Our understanding is that no such provisions were ever established by EQB for Agremax.
- 2) We **have** inspected ten sites in the **municipalities** of Arroyo, **Guayama**, and Salinas, where Agremax has **been** placed on **the** land, including residential **areas** and **areas close** to wetlands and surface water. It is our observation, based on these **inspections** and subsequent investigation, that the land placement of Agremax may constitute disposal at **several** of the sites inspected. **The** volumes **observed** placed on the land in **some** cases appeared to **far** exceed those we would consider necessary for the appropriate engineering use of the construction material for which Agremax **was** allegedly **being substituted**. In addition, **several** of **the** Agremax land placement sites appeared to **have been** abandoned, in that, **despite** the **presence** of **signs** indicating **construction** pennit issuance, the slated construction projects had not **been** initiated and no **construction** equipment or activity was noted, while **several** sites appeared overgrown and had **been** used for the illegal deposition of waste materials.
- 3) **The** locations at which **some** of the deposition of Agremax has **taken** place overlie shallow **sole source** drinking water aquifers, **and** are thus **particularly** sensitive to environmental harm. A **2007 EPA report**² **documents known** damage cases from the mismanagement of coal ash in unlined landfills and **surface impoundments** and the subsequent **contamination** of **drinking** water aquifers **through** the leaching and ground water **transport** of contaminants in the **ash**. Two EPA **Orders**, issued in **2003** and **2004** under the Comprehensive Environmental Response, Compensation, and Liability Act, and a subsequent **2004** citizen suit **taken** under Section **7002** of the **Resource** Conservation and Recovery Act, **address** aquifer contamination by the leaching of toxic constituents from an unlined **coal ash** landfill in Pines, Indiana. **The** EPA proposed rule **states** that: "...EPA recognizes that **seven proven damage** cases involving the large scale placement, **akin** to disposal, of [coal combustion residues] has **occurred** under the guise

² "Coal Combustion Waste **Damage** Case Assessments," U.S. EPA, **Office of Solid Waste**, July 9, 2007

of "beneficial use"... " and that "...therefore, today's proposed rule explicitly **removes** these **types** of uses from the category of **beneficial** use..." (75 F.R. 35161).

Please be advised that EPA **intends** to investigate the potential for **endangerment** of **human** health or the environment from the land placement of Agremax in southeastem Puerto Rico, and will, as appropriate, evaluate the potential applicability of Section **7003** of **the Resource Conservation and Recovery Act**.

Given the above, EQB may wish to immediately reevaluate the basis for its Resolutions and Notifications for Agremax. In doing this, EQB may wish to consider: 1) beneficial use determination provisions adopted by **various** states, **including** factors such as engineering controls, limitations on **allowed** uses, and **site** monitoring **and** risk **evaluation** based on environmental conditions, and 2) as **stated** in the proposed rule **with respect** to unencapsulated beneficial **reuse**, "...**hydraulic** conductivity of **the** subsurface, the rainfall in **the area**, the depth to groundwater, and **other factors**..." (75 F.R. 33164).

Please **feel free** to contact me at (212) **647-5000** should you wish to discuss this matter **further**.

Sincerely yours,



Judith A. Enck
Regional **Administrator**

cc: **Allan** Dyer, President
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